



COMPLETE HORTICULTURE PACKAGE FOR FARMERS BY VST SHAKTI POWER TILLER



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INTRODUCTION

VST SHAKTI 130DI POWER TILLER - BEST IN THE FIELD FOR HORTICULTURE

VST Shakti gives a guide for complete horticulture package for farmers. It aims to cover complete process, agricultural implements required, key benefits of using VST tillers for cultivation and economics of horticultural farming.



KEY FEATURES

- Rotary widths: 600, 540 & 340 mm.
- Turning Radius: with brake 1.0 mt; without brake 1.5 mt
- Best for Inter Cultivation 1.22 mt & 1.53 mt width.
- Less soil compaction; very good tilling; 25% increase in yield and field coverage.
- Robust transmission assembly design, which is capable of taking extreme loads even on dry soil.

- First company to introduce Power Tillers as farm machinery replacing manual farming.
- Easy maneuverability & light in weight.
- Unique design; easy availability of spares & service; good resale value.
- Established brand over decades in the farming community.

FIELD PREPARATION

CULTIVATOR

A Cultivator is used to break up the soil prior to sowing. It is drawn by a power tiller.



KEY FEATURES

- Tines / blades are designed for heavy duty working.
- 5 tynes are provided in rigid type cultivators.
- $0.25 \sim 0.4$ acres can be cultivated in 1 hour with average diesel consumption of $1.0 \sim 1.25$ lts / hr of operation

- Rigid cultivator is used for tilling soil.
- Helps in preparing the soil for a new crop.
- Has high strength & rigidity.
- Tough in construction.

FIELD PREPARATION

ROTARY ASSEMBLY

A rotary assembly is a mechanized device used for breaking up the topsoil in the process of preparation before planting. Spinning blades are attached to the tiller that will spin and slice into the soil in order to create loose topsoil to make it ready for planting.



KEY FEATURES

- 18 types can be fitted for best performance in dry land.
- Straight tynes recommended for dry field.
- 0.3 \sim 0.45 acres of land can be covered in 1 hr with average diesel consumption of 1.25 \sim 1.50 lts / hr
- Depth of Tilling is $150 \sim 225$ mm.

- Simple in construction with strong design appropriate for varied soil conditions
- The application includes: Soil conditioning, weed control, seedbed preparation.
- Most suitable for medium & small farmers.
- Sturdy Construction
- · Minimum load on Tiller.

FIELD PREPARATION

BUND FORMATION

Building bunds help in slowing down of water runoff, which leads to increased water infiltration and enhanced soil moisture.



KEY FEATURES

- 18 no. Bent tynes are fitted to the rotary.
- Sufficient moisture is a must for good bund formation.
- Average fuel consumption $-0.75 \sim 1.0$ lts / min

- Useful for forming bunds around trees
- Bund will help in preserving water around the tree.
- Bund formation is made by operating the tiller in reverse direction.
- Adequate training is a must to an operator before bund forming

WATER PUMP



KEY FEATURES

- Pump is driven by a belt connected to engine pulley.
- 7.6 x 5 cms pump is most suitable for general purpose use.
- Suction head (height) 5 meter
- Delivery head (height) upto 7.62 meter
- Discharge 440 lts / min
- Average fuel consumption $-1.25 \sim 1.5$ lts / min

- Useful for pumping water from irrigation canals, lakes and wells, etc..
- This is very essential where there is water scarcity or less rainfall.
- Crops can be safe guarded with timely supply of water.
- A tanker with self priming pump can be easily fitted for cleaning septic tanks, cess pools, clogged drainage, wells etc.

SPRAYING

The sprayer unit is used for spraying pesticides and insecticides to avoid pests in the field.



KEY FEATURES

- 100% mixing of water and chemical is ensured during the spraying.
- Spraying pump is driven by the belt drive from the engine pulley.
- Available in 200 tank capacities, weight of spraying unit ~ 180 kgs
- Average diesel consumption is $1.25 \sim 1.5$ lt per hour of operation.

- Useful for spraying of chemicals / insecticides on plants in open field.
- Nozzles are provided to ensure equal spreading of the spray on both sides of the tiller.
- Nozzle pressure can be adjusted.
- Spraying pump is driven by the belt drive from the engine pulley.

PIT FORMING - AUGER DIGGER



KEY FEATURES

- Pit diameter is $30 \sim 35$ cm
- Depth of the pit is 45 cm
- No. of pits that can be dug $-40 \sim 45$ / hr of operation
- Average fuel consumption is 0.80 lts / hr of operation

- Auger digger is very useful attachment for making pits.
- It is attached to the hitch bracket in place of Rotary assembly.
- The auger digger consists of a spiral with a cutting edge at the lower end.
- The pinion which is attached to the rack is driven by belt & pulley arrangement, the auger rotates at the speed of 110 rev / min.
- A dog clutch mechanism is provided to engage / disengage the engine power to the auger digger
- This is easily transportable with the help of 2 metal wheels provided to the auger digger.

HAULAGE

TRANSPORTATION



KEY FEATURES

- Trailer capacity is maximum 1.5 tons.
- Standard dimensions 3.85 x 1.10 x 0.40 mts (L x W x H)
- Average consumption of diesel is 1.0 lts \sim 1.25 lts / hr.
- Trailers can be suitably modified for:
 - Garbage collection & transportation
 - A tanker of maximum capacity 1000 litres for carrying drinking water

- Primarily required for transporting manure, chemicals, implements, produce etc.
- Trailer with a mechanical brake is commonly used.
- Hydraulic tipping type can be made on specific request.
- Spraying pump can be fitted with modification for spraying application.

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